

INSTALLING WITH SPRING CUSHIONED HYDRAULIC LIFT

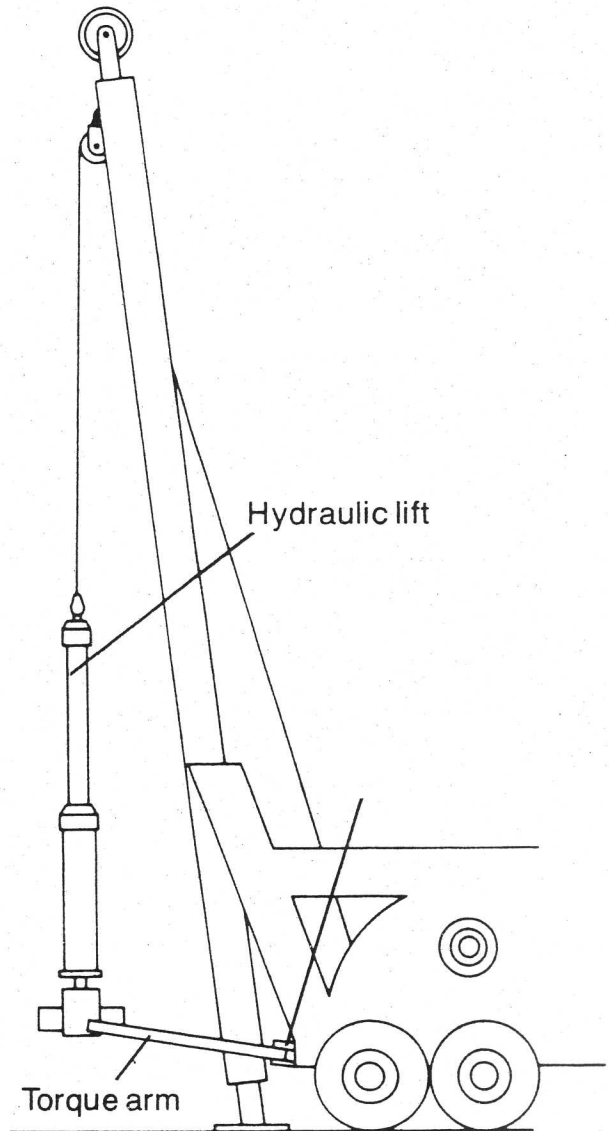
1. Move Tong to convenient position near well.
2. Lift hydraulic cylinder, set in position on tong, attach with pins, and connect hydraulic line from control valve to cylinder.
3. Lift tong with line approximately 3 feet above well head. (Cylinder has 6 foot travel). The hydraulic lift is ready to operate by means of controls mounted on same side of tong as tong controls. The line supporting the tong should be located so the tong will hang over the center of the well.
4. Well anchor bracket on right rear corner of rig approximately 4 feet from ground. Additional anchor brackets are available for use of tong on more than one rig.
5. Connect torque arm to rear of tong and to anchor bracket on rig. Then adjust so that tong will be at right angle to torque arm. Tong should then have about 4 feet of free vertical travel. Lower tong over tubing.
6. Attach hoses from hydraulic power source. Be sure all self-sealing couplings are tight before starting engine. Tighten firmly by hand. Failure to do this will cause engine to run at full speed when tong is not in use.
7. To level tong, use the leveling screws and compression spring nut. If tong is not level it will cause excessive wear to tong inserts. (Photo this page).

JAW ARRANGEMENT

1. For breaking out joints, place jaws on pins with letter "B" up and long side of jaw against gear teeth.
2. For making up joints, place jaws on pins with letter "M" up and long side of jaws against gear teeth.
3. Inserts are reversible and should be turned around when they become worn or replaced if reversing fails to bring sharp teeth in contact with pipe.

SETTING HYDRAULICS FOR PROPER OPERATION

1. With clutch disengaged and all hoses connected, start engine.
 2. Engage engine clutch.
 3. Adjust tong relief valve. The relief valve on the tong operates in make-up direction only.
 - (a) Turn relief valve adjusting screw to left to reduce pressure until tong reduces speed.
 - (b) Place tong on tubing to be made up and gradually increase the pressure to reach make-up required.
 - (c) Lock relief valve adjusting screw and make-up second joint checking torque where tong stalls.
 - (d) Make minor corrections as necessary until torque readings are satisfactory.
- NOTE: It Is NOT Necessary To Change MAKE-UP Torque To BREAK-OUT.
- Tong operations at system pressure for break-out System pressure is controlled by relief valve set at 2200 PSI in Power Unit Tank. PSI should not exceed 2500.lbs.
4. If pump fails to pick up oil after hoses have been disconnected or tong runs in surges, screw out relief valve all the way and let pressure back to tank. Circulate to remove air. Screw in pressure screw until tong operates. Repeat if necessary.
 5. In operating tong, stop operating lever in center position one second before reversing motor. This reduces fluid shock in motor.



HYDRAULIC LIFT

